

WHAT IS CLAIMED IS:

a 1. A DNA segment encoding a mammalian  
a GDF-1 protein, ~~or an epitope specific thereto, or a~~  
~~DNA fragment complementary to said DNA segment.~~

B 2. The DNA segment according to claim 1  
wherein said GDF-1 protein has the <sup>GDF-1</sup> sequence as  
defined in Figure 2, 11A or 11B.

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c2  
c7  
K 3. The DNA segment according to claim <sup>22</sup> 1  
wherein said mammal is a mouse, ~~hamster~~ or human.

4. A mammalian GDF-1 protein  
substantially free of proteins with which it is  
naturally non-covalently associated, or an epitope  
specific thereto.

5. The protein according to claim 4  
which is unglycosylated.

6. The protein according to claim 4  
wherein said mammal is a mouse, hamster or human.

7. The protein according to claim 4  
wherein said protein is chemically synthesized.

8. The protein according to claim 4  
wherein said protein has a sequence as defined in  
Figure 2, 11A or 11B, or functionally equivalent  
variation thereof.

9. A recombinantly produced GDF-1  
protein having the amino acid sequence given in  
Figure 2, 11A or 11B, or functionally equivalent  
variation thereof.

10. The protein according to claim 9 wherein said protein ~~is~~ unglycosylated.

11. A recombinant DNA molecule comprising:

- a c 7 linked to  
a and
- i) said DNA segment according to claim ~~17~~<sup>22</sup>, operably  
ii) a vector.

12. A host cell stably transformed with said recombinant DNA molecule according to claim 11.

13. The host cell according to claim 12 wherein said cell is a procaryotic cell.

14. The host cell according to claim 12 wherein said cell is a eucaryotic cell.

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15. A method of producing a recombinant GDF-1 protein, or functionally equivalent variation thereof, comprising culturing said host cell according to claim 12 under conditions such that said segment is expressed and said GDF-1 protein thereby produced, and isolating said GDF-1 protein.

a  
a

16. A DNA segment encoding a mammalian UOG-1 protein, ~~or an epitope specific thereto, or a DNA fragment complementary to said DNA segment.~~

17. A mammalian UOG-1 protein substantially free of proteins with which it is naturally non-covalently associated, or an epitope specific thereto.

18. A recombinantly produced UOG-1 protein having the amino acid sequence given in

Figure 11A or 11B, or functionally equivalent variation thereof.

19. A recombinant DNA molecule comprising:

- a  
a
- i) said DNA segment according to claim 16; and, operably linked to
  - ii) a vector.

20. A host cell stably transformed with said recombinant DNA molecule according to claim 19.

21. A method of producing a recombinant UOG-1 protein, or functionally equivalent variation thereof, comprising culturing said host cell according to claim 20 under conditions such that said segment is expressed and said UOG-1 protein thereby produced, and isolating said UOG-1 protein.

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